

Gasification plant planned for San Jose

REFUSE-DERIVED FUEL (RDF), GASIFICATION, FUELS AND CHEMICALS, BIOMASS, INSTALLATIONS AND STARTUPS
Demonstration unit will be built at the San Jose-Santa Clara Regional Wastewater facility.

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ICM Inc., based in Colwich, Kansas, has signed a contract with Florida-based JUM Global LLC, a global waste solution developer contracted with the city of San Jose, California., for a gasification demonstration unit using ICM's proprietary gasification technology.

This gasification demonstration unit will be operated at the San Jose-Santa Clara Regional Wastewater facility, which will process up to 10 tons per day of urban waste biomass such as urban woody biomass, storm debris, yard waste, tree trimmings, as well as construction and demolition materials from the city's solid waste collection program. The biomass will be blended with a small portion of biosolids from the wastewater facility.

The gasification unit will help the region by demonstrating a process that can be used in both the disposition and the application of these materials to produce a high quality syngas, which can be used to produce transportation fuels.

Jon Orr, ICM's capital sales manager, says, "This demonstration project, utilizing ICM's gasification technologies, will help advance the path to renewable transportation fuels using waste biomass at a scale that makes economic sense."

San Jose, a recipient of a California Energy Commission match funding grant under the Alternative and Renewable Fuel and Vehicle Technology Program, contracted with JUM Global to partner with ICM Inc. for the project, which is scheduled to be completed by the end of April 2015.

"While gasification has been around for a long time, there is renewed interest in this process as a way to convert different types of waste to produce renewable energy," says Kerrie Romanow, director of San Jose's Environmental Services Department. "This demonstration project will help reduce greenhouse gas emissions and our dependence on others for transportation fuel."

Dave McCarthy, JUM Global COO, says, "We are very excited to be working with the gasification team at ICM as our technology partner for this San Jose project. Their technology and ability to swiftly react to changing project dynamics is second to none. Together with ICM and the city of San Jose, we feel we have the best team possible for this project."

Chris Mitchell, president of ICM, says, "We're pleased that our technology was chosen by JUM Global and San Jose for this project. We believe that our gasification solution is a significant next step in delivering valuable technology options to the renewable energy sector."

In 2009, ICM built and began operating a commercial-scale demonstration gasifier with the capacity to convert 150 tons of biomass per day. Over the next four years, ICM successfully tested more than 16 feedstock types, processed more than 8,400 tons of material and logged more than 3,200 hours of operating time. Examples of the feedstocks tested included: refuse-derived fuel (RDF) generated from municipal solid waste, tire-derived fuel mixed with RDF, wood chips, pine bark, wheat straw, corn stover, chicken litter, switchgrass, automobile shredded residue mixed with RDF and other biomass/energy crops.

